

What is claimed is:

1 A user authentication system comprising:
a communication terminal;

5 physical-port changeover means having

packet signal input means for inputting a
packet signal, which was dispatched to a
predetermined communication network requiring
authentication from this communication terminal, on
10 an upstream side thereof,

authentication existence determination means
for determining whether or not the packet signal,
which this packet signal input means input, is a
signal that has received the authentication of said
15 predetermined communication network,

an unauthenticated-signal port for, at the
time that this authentication existence
determination means determined that this was a
signal that had not received the authentication yet,
20 outputting this and

an authenticated-signal port for, at the time
that said authentication existence determination
means determined that this was a signal that had
already received the authentication, outputting
25 this;

temporary-use address offer means for, at the time
that said packet signal was output from the
unauthenticated-signal port of this physical-port
changeover means, temporarily giving a temporary-use IP
5 address for login to the communication terminal that
dispatched its packet signal;

temporary-use IP address/communication terminal
correspondence storage means for storing a correspondence
between the temporary-use IP address that this temporary-
10 use address offer means offered, and the communication
terminal;

login picture display means for, at the time that the
communication terminal, which received an offer of the
temporary-use IP address by said temporary-use address
15 offer means, logged in said predetermined communication
network for receiving the authentication, and its packet
signal was output from said unauthenticated-signal port,
inputting this for displaying a login picture;

authentication-propriety determination means for, at
20 the time that the login was made from said communication
terminal by using this login picture display means,
determining whether or not the authentication is made for
this; and

network address bestowal means for, at the time that
25 this authentication-propriety determination means

determined to make the authentication, giving to the communication terminal a network address for transferring the signal packet to a desired communication network, which became an object of the authentication, in a manner
5 that it is caused to correspond to the communication terminal stored in said temporary-use IP address/communication terminal correspondence storage means, instead of the temporary-use IP address.

10 **2** The user authentication system according to claim 1, said user authentication system characterized in comprising network distribution means for, at the time that said communication terminal, to which the network address was given by said network address bestowal means,
15 dispatched the packet signal, receiving this through said authenticated-signal port to distribute this to the corresponding communication network.

3 The user authentication system according to claim 1,
20 said user authentication system characterized in that said authentication existence determination means comprises a user registration section having users, who received the authentication, registered, and determines whether or not the authentication for each user was made, based on
25 whether or not the user was registered in this user

registration section.

4 A user authentication system comprising:
a communication terminal;

5 physical-port changeover means having

packet signal input means for inputting a
packet signal, which was dispatched to a
predetermined communication network requiring
authentication from this communication terminal, on
10 an upstream side thereof,

authentication existence determination means
for determining whether or not the packet signal,
which this packet signal input means input, is a
signal that has received the authentication of said
15 predetermined communication network,

an unauthenticated-signal port for, at the
time that this authentication existence
determination means determined that this was a
signal that had not received the authentication yet,
20 outputting this and

an authenticated-signal port for, at the time
that said authentication existence determination
means determined that this was a signal that had
already received the authentication, outputting
25 this;

temporary-use address offer means for, at the time
that said packet signal was output from the
unauthenticated-signal port of this physical-port
changeover means, temporarily giving a temporary-use IP
5 address for login to the communication terminal that
dispatched its packet signal;

temporary-use IP address/communication terminal
correspondence storage means for storing a correspondence
between the temporary-use IP address, which this
10 temporary-use address offer means offered, and the
communication terminal;

login picture display means for, at the time that the
communication terminal, which received an offer of the
temporary-use IP address by said temporary-use address
15 offer means, logged in said predetermined communication
network for receiving the authentication, and its packet
signal was output from said unauthenticated-signal port,
inputting this for displaying a login picture;

authentication-propriety determination means for, at
20 the time that the login was made from said communication
terminal by using this login picture display means,
determining whether or not the authentication is made for
this; and

normal-IP-address bestowal means for, at the time that
25 this authentication-propriety determination means

determined to make the authentication, giving to the communication terminal a normal IP address in a manner that it is caused to correspond to the communication terminal stored in said temporary-use IP address/communication terminal correspondence storage means, instead of the temporary-use IP address.

5 The user authentication system according to claim 4, said user authentication system characterized in comprising IP subnet distribution means for, at the time that said communication terminal, to which the IP address was given by said normal IP address bestowal means, dispatched the packet signal, receiving this through said authenticated-signal port to distribute this to the corresponding IP network.

6 The user authentication system according to claim 4, said user authentication system characterized in that said authentication existence determination means comprises a user registration section having users, who received the authentication, registered, and determines whether or not the authentication for each user was made, based on whether or not the user was registered in this user registration section.

7 The user authentication system according to claim 5,
said user authentication system characterized in that said
IP sub-network distribution means employs either the IP
address or an MAC address of said communication terminal
5 to make distribution of the packet signal sent from the
communication terminal.

8 The user authentication system according to claim 5,
said user authentication system characterized in that said
10 IP subnet distribution means distributes the packet signal
to a communication network having a destination with which
both of said IP address and an MAC address accorded.

9 A user authentication system comprising:
15 a communication terminal;
address bestowal means for, at the time that access
was made from this communication terminal, giving to this
an address that is accessible by an internet; and
authentication-time Web access means for, at the time
20 that said communication terminal made use of the address
given by this address bestowal means to request
authentication, causing said communication terminal to
make an input operation and display for the authentication
with a Web display picture, which is displayed at the time
25 of internet access, taken as a picture for the

authentication.

10 A user authentication method comprising:

an internet access request step of, in making access
5 to an internet, dispatching a packet signal from a
predetermined communication terminal to a network service
provider connected to a local area network to make a
request for access to an internet;

temporary-use IP address return step of, at the time
10 that the request was made for access to the internet in
this internet access request step, returning a temporary-
use IP address for login to this communication terminal;

an authentication request step of using the temporary-
use IP address returned in this temporary-use IP address
15 return step to dispatch the packet signal of an
authentication request for a specific internet service
provider from said communication terminal;

an authentication-propriety determination step of,
based on information described in the packet signal sent
20 in this authentication request step, determining on a
network service provider side whether or not
authentication of said specific internet service provider
is obtained;

a normal-IP-address return step of, at the time that
25 it was determined in this authentication-propriety

determination step that the authentication was obtained, returning to its communication terminal the IP address assigned for said specific internet service provider;

5 a packet-signal-for-internet-access dispatch step of using the normal IP address returned in this normal-IP-address return step to dispatch the packet signal for internet access from said communication terminal; and

10 a packet signal distribution step of receiving the packet signal dispatched in this packet-signal-for-internet-access dispatch step to check said normal IP address thereof, and to distribute this to said specific internet service provider.